deliver without restraint under the Modified Final Judgement ban on information services.

In 1988, PBD hired a new Director of Business Development who had experience with the Washington Post and Dow Jones Information Services. This new director guided Pacific Market Access to test the market of pre-electronic yellow pages with directive marketing services. PBD considered these directive marketing services not in violation of the information services prohibition of the MFJ. Three service products were developed and market trialed in 1988:

1. SMART TALK - an audio ad-extender for update information
2. SMART POST - a direct mail service
3. SMART DESKTOP - a software package for direct marketing

Meanwhile, the new director also began examining the need for acquisition, management and use of proprietary California marketing and listings database.[15] Although these three service products were later terminated, they served the company well by providing market feedback on directive marketing services. More significantly, these three service products also mark the first step PBD took towards providing directive marketing services, one which EYP would ultimately be able to serve.

On January 18, 1991, the PBD Board reported that the 1990 completed market trials of these new product concepts drew a conclusion that their rollouts were not financially viable.[16] The Board then formed an internal EYP task force to conduct a more detailed market research and to work with Telesis on the Information Services Project that explored strategic opportunities relating to information services.

The Board also directed PBD in its "1991 PLAN COMMITMENTS" to:

• Position PBD to be a "profitable provider" of electronic publishing and database services as these markets develop. (which required the lifting of MFJ restrictions.)

• Complete market research and identify opportunities.

• Dedicate PBD public policy initiatives to the removal of MFJ restrictions, including the provision of electronic yellow pages.

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[15]September 27, 1988, Presentation to the Board of Directors (PB Document #021231 - 021267)

[16]January 18, 1991, the PBD Board Memo (PB Document #020782 - 783)

- Continue to assess the opportunities to broaden PBD relationships with national marketing firms.

- Implement IMS according to schedule.

BUILDING THE HEART OF EYP: EYP DATABASE SYSTEM

1992 Version

Like the printed yellow pages, the EYP requires an even more enhanced database system. According to the 1992 EYP Business and Research Plan[17], the EYP database system would consist [REDACTED   ]:

    1) The database itself
    [OTHER ELEMENTS HAVE BEEN REDACTED]

1. The database

First, the 1992 EYP Business and Research Plan is based on a corporate plan in which EYP would be provided by a Pacific Bell affiliate called Pacific Bell Electronic Publishing Services (PBEPS), presumably below-the-line operation. (For more on this subject, please see also Chapter 6, Corporate Placement of EYP) Then the Plan denotes that the database is not a product, but instead, a repository of information from which PBEPS will develop products. The database is designed to consist of [REDACTED] separate tiers of information that build upon basic listings which would be purchased from PBD, Pacific Bell, or another source.

                    [TIER LISTING REDACTED]

The Basic Listing Tier is the name, street address, telephone number, city, state and heading(s) for every business in the state of California.

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[17]August 4, 1992, Pacific Bell Electronic Publishing Services Co.'s Database and Consumer Products Projects, Business Case Summary, Preliminary Funding Request. (PB Document 014552 - 014569)

[REDACTED

THE MATERIAL ON THIS PAGE DESCRIBES THE EYP DATA BASE SYSTEM AND
HAS BEEN REDACTED

THE MATERIAL ON THIS PAGE DESCRIBES THE EYP DATA BASE SYSTEM AND
HAS BEEN REDACTED

REDACTED]

selected to prepare a high-level system architecture for this system. The consultant's work would outline [

REDACTED
                        ]. They would also estimate the costs and time involved for full implementation of the database. The Plan called for the consultant's work to begin in [REDACTED], and conclude [REDACTED].

Tracing The Database Development Back to 1988

1988 the year when EYP database and system were conceptualized

PBD recognized the heart of the electronic yellow pages was the database. In the very beginning when its CEO decided that PBD's future lay with EYP, PBD had already focused and conceptualized the building and enhancement of its existing database system. On May 2, 1988, the Senior Management Group Meeting recognized the value of an enhanced database when this was quoted: "Automatic customer survey inputs and reports are tailored to the nature of the (sales) contact. This information generates a <u>database that can be sold.</u>"[18]   The next questions are where would PBD store this database and what kind of data PBD should obtain from these customer surveys and inputs.

The new Information Management System was the answer to the database storage question and the July 5, 1988, "PSF Presentation" specified the kind of data to be collected[19] as it emphasized the "increased value of the customer listing data as more information is collected and stored for each customer":

        Examples: *Language preference*
                  Size of business
                  Products brands sold
                  Years in business
                  Competitive directory activity
                  Other media expenditures

---

[18]May 2, 1988, the Senior Management Group Meeting, (PB Document #021485)
[19]"IMS Communications Roll Out - What is IMS?"
IMS Impact on Marketing
Flexibility to add or change data elements
Information services business of the future
Expanded competitive information
Demographic and Economic information
(PB Document #021371 - 021374)

The presentation also cited that the IMS would "Increase ability to add or change data elements to speed product enhancements." As a result, this would place PBD in a "premier position in the information services business of the future" with:

- Complete listing information for business and residence customers for list sale or rental opportunities.
- On-Line ability to search for businesses by Map location, and obtain advertising copy information.
- Directory type products produced on floppy disks and CD-ROMS.
- Wider access to demographic and economic information to provide more accurate market modeling and increase efficiency of selling tools.
    - Consumer surveys
    - Possession and usage studies.

1989 Refining EYP System And Database Design

1. Information Management System To Facilitate PBD'S Diversification Into New Marketing Services

One critical element in the IMS system design was its accommodation for business and data growth. On January 4, 1989, the IMS REVIEW MEETING between Pacific Telesis and Pacific Bell titled "IMS Core Cluster Functional Specifications Overview" highlighted[20] the terms "growth" and "addition" repeatedly:

"Strategic Element
Functional Viewpoint:
- Storage of proprietary data for use in and design of new products
- Support of multiple serving directories for single customer

Technical Viewpoint:
Future Growth
- DEC architecture permits incremental addition of computers to existing clusters to accommodate growth in business and new applications
- DECNet network architecture expandable to accommodate additional users and location
- Database supports substantial growth in customer base
- Software supports addition of new data elements and applications with minimal disruption" (emphasis added)

---

[20]May 2, 1988, the Senior Management Group Meeting (PB Document #021148 - 149)

On April 12, 1989, in his Information Management System (IMS) Project Board Presentation, John Gaulding, President & CEO of PBD addressed P.J. Quigley, Pacific Telesis Chairman, urging implementation of IMS;[21]

> *"Ultimately, IMS can provide a platform for business development and possible diversification into a range of new marketing service, which would not be supportable under the existing systems architecture.*
>
> *In addition, Directory's competitors and other RBOCs are all in the process of designing and implementing enhanced systems architectures.* AD/SALES II software, developed by AMDOCS (and selected by Directory for IMS) is being implemented in Bell Atlantic, Southwestern Bell and in Transwestern Publishing (a division of U.S. West)...
>
> ...The User Organizations have been responsible for defining the functional requirements of the system. The users have partnered with the Information Systems' Organization to ensure that the users' needs are driving the System's content and not the limitations or the capabilities of technology... The IMS Project is perceived by PBD as a *Business Change, not as an Information Systems Project.*
>
> ...My staff and I look forward to discussing the IMS Project with you and obtaining your support for PBD to proceed with this very important project which will improve PBD's quality, customer service and operational efficiency, will strengthen PBD's market and competitive position, will provide PBD with the necessary information and operational system infrastructure which can support *profitable new lines of business and will provide significant financial benefits for PBD and its parent, Pacific Bell.* I recommend that you support the implementation of the IMS Project as currently defined." (emphasis added)

2. **Pacific Market Access To Implement the EYP Development and Database Design**

By this time, the main function of developing the database system was handed over to the Pacific Market Access organization.

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[21]April 12, 1989, Information Management System (IMS) Project Board Presentation (PE Document #021024 - 030)

On July 25, 1989, a presentation to the PMA DATABASE VISION
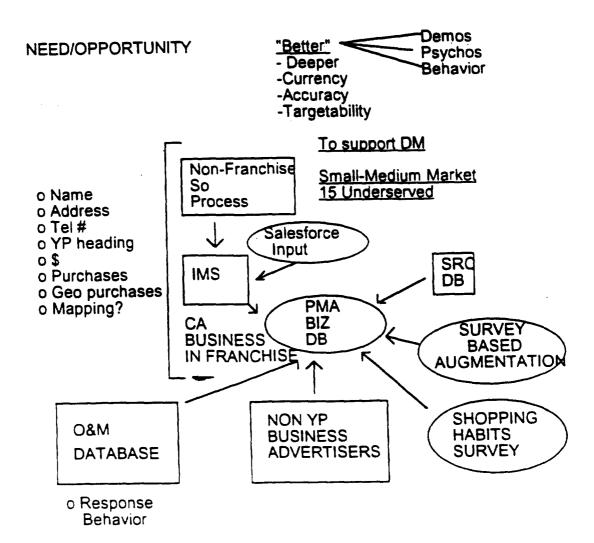IDEATION SESSION by Marketing Corporation of America cited:

> "Marketing Corporation of America has been assigned to work
> with PBD as a follow on to the PMA 2000 work to:
> - Develop a long range vision and outline plan for
>   implementation of a PMA 2000 marketing information database.
> - To accomplish this goal, several critical strategy, vision,
>   and requirement questions must be answered concerning:
>> The Markets
>> The Database Definition
>> Data Sourcing
>> Economic Justification

The Database Systems envisioned would typically:
- Save information about business customers, including leveraging
  off of information collected to support Yellow Page
  Directories,
- Save information on residential consumers, and
- Provide systems to collect, update, and match information from
  many sources into a common system.

NEED/OPPORTUNITY   "Better"   Demos
                               Psychos
                    - Deeper   Behavior
                    -Currency
                    -Accuracy
                    -Targetability

To support DM

Small-Medium Market
15 Underserved

Non-Franchise
So
Process

o Name
o Address
o Tel #
o YP heading
o $
o Purchases
o Geo purchases
o Mapping?

Salesforce
Input

IMS

SRC
DB

PMA
BIZ
DB

CA
BUSINESS
IN FRANCHISE

SURVEY
BASED
AUGMENTATION

O&M
DATABASE

NON YP
BUSINESS
ADVERTISERS

SHOPPING
HABITS
SURVEY

o Response
Behavior

Potential Candidates For PMA Information Database

Category:
EYP ad content/information extension
Data items:
Hours, prices, added services
Special capabilities
Unique selling features
Geo-locator
Seasonality
Media:
Audiotex, CPU, Kiosks
Market:
Consumers

This PMA Vision was also confirmed in a memo by INFORMATION
SERVICES BUSINESS UNIT, titled, "BUILDING FOR THE FUTURE", dated
September 14-15, 1989. It cited the "Strategic Vision"[22]:

> "A decade from now... Information Services Business Unit
> will have:
> * Achieved a knowledge base of emerging technologies so as to
>   ensure PBD's success in the marketplace
> * Developed an expert information systems and publishing
>   consulting practice whose target market is the information
>   industry
> * Developed a capability as a leading information broker that
>   obtains, integrates and delivers information
>
> Technology Strategy
> Build information systems and publishing technology:
> Philosophy   : State-of-the-Art
> Measures   : Optimize PBD's Competitive Advantage
>   : Create Shareholder Value
> Objective   : Provide Information Systems and Publishing
> capabilities for the generation of New Products and Service:
> in a cost effective and timely way
>
> Strategic Objectives
> * Implement END-TO-END Information Systems and Publishing
>   Technology that optimizes the creation of PBD's competitive
>   advantage and Shareholder Value
>
> ON-GOING
> * Manufacturing/Publishing research and development activiti
>
> FUTURE

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[22]April 12, 1989, in his Information Management System (IMS)
Project Board Presentation (PB Document #020942 - 945)

- Need to develop capabilities as a leading information broker that obtains, integrates and delivers information
- Development of information systems and publishing consultative capacity
- Need to expand information systems & publishing research and development capabilities

1990 EYP Further Refined By EYP Task Force

By 1990, PMA was officially linked to the EYP. The director of New Business Director was named the EYP Project Manager. In a memo by this Project Manager, dated May 17, 1990, and titled "First Meeting of PMA (Pacific Market Access) EYP Task Force"[23] synergy with PBD's sales was considered:

> "The second homework assignment is to arrange to spend at least one day with a PBD sales rep .... the objective ...is to assess the reasonableness of our expecting sales reps to gather information for the EYP database in addition to doing their existing jobs of selling SMART Yellow Pages advertising."

On May 25, 1990, the EYP Project Manager sent a memo to the PBD EYP Task Force titled "EYP definition"[24]:

He claimed that PBD had by then defined an EYP system which would consist of three significant product/service categories and eight critical system capabilities. In addition, two key assumptions made needed to make explicit.

The product/service categories PBD had defined were information, Transactions, and User-Initiated Queries. The critical system capabilities are ease of use, relational capability, direct connect, product preview capability, multiple language output, multiple media output, heuristics, and bulletin board capability. More details about each of these items follow:

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[23] May 17, 1990, "First Meeting of PMA (Pacific Market Access) EYP Task Force" (PB Document # 034624 - 628)

[24] May 25, 1990, memo to the PBD EYP Task Force titled "EYP Definition" (PB Document #034648 - 651)

1. Defining EYP Products And Servcies

INFORMATION

1) Shopping Information
   - From whom are given products, brands and services available?
   - What's available from a given store or vendor?
     - Standard inventory
     - Specials

2) Community information
   - Emergency services
   - Community resources
     - Recreational facilities
     - Educational services
     - Government services
     - Family and children's activities

3) Locational/Mapping Information
   - Where is it?
   - How do I get there?

4) Evaluative Information
   - Restaurant reviews
   - Movie reviews
   - Product/service quality evaluations

TRANSACTIONS

- Place an order for goods and/or services
- Make a reservation - e.g. theater, restaurant, golf course
- Get on or a mailing list - print or electronic
- Make a payment, with debit or credit cards

USER - INITIATED QUERIES (Buyer Network?)

User inputs his specific request - for a loan rate, a merchandise item, a price, etc. - and qualified vendors respond with "bids" and availability information.

2. Defining EYP System Capabilities

1) EASE OF USE

The EYP Definition recognized that the most important criterion for the EYP system would be its ease of use. Ease of use is a critical success factor for EYP. One way of accomplishing ease

of use would be to have users interact with PC software rather
than the remote host (information provider).

2)   RELATIONAL CAPABILITIES

Search criteria to include:
- Heading
- Business/store name
- Price
- Geography
        -City or town name
        -Distance from specified location
- Availability of delivery/home call
- Product or brand
- Product availability (is it in stock now?)
- Age (age of house, year of car)

Direct Connect
- Voice
- Computer
- Fax

Product Previews/Sampling
- Images
        - Video
        - Still
- Sound (e.g., excerpt from a new album)
- Hard Copy (e.g., restaurant menu)

Output in Multiple Languages

Output in Multiple Media
- Computer-to-computer (or dumb terminal)
- Voice
        - Operator-assisted
        - Audiotex
- Fax

Heuristics
- System includes memory/learning capabilities
- Selected dissemination of information (SDI)
- Artificial intelligence

Bulletin Board Capabilities

The EYP Definition's two key assumptions were:

1)   The PBD EYP database would cover the state of California, including non-advertisers as well as advertisers, out-of-franchise areas as well as franchise areas.

2)   The information in the database would be updated very frequently, with specific frequency to be defined by category of information. Advertisers would have the capability to update information at times of their own choosing, although PBD would retain the editorial function of assuring that information on the system meets minimal standards of acceptability. This might be accomplished by routing advertiser-initiated updates to a queue where they would examine by PBD before being released for the system.

Building EYP Delivery Channels

Where the heart of EYP is the database system, the attractiveness of the EYP is the many versatile channels of access. Four main channels are thus far contemplated:

    (1) Operator-assisted.
    (2) Public access.
    (3) Online.
    (4) Disks.

(For more detail description , please see Chapter 3, Introduction to EYP.)

1990 VISION

In a "EYP Progress Report" dated June 22, 1990, it was cited that the PBD's vision of an EYP service began with a comprehensive database of local shopping information that PBD claimed as its principal area of competitive advantage. Other important shopping information, such as classified ads, would come from third parties. PBD envisioned three principal delivery vehicles for EYP:

* Telephone. Users will talk to trained operators who will query the EYP database and respond by voice, audiotex, fax, or other means. As the service evolves, substantial automation will take in telephone delivery of EYP.

* Disks (CD or floppy). PBD will use the EYP database to create a series of pre-determined information "products," which would be distributed on optical or magnetic media. Disc-based distribution of EYP would create the potential for graphics, video and sound in advertisements.

- Online. Users with personal computers or terminals equipped with modems would purchase communications software and dial in to the EYP database on their own.[25]

AN ASSESSMENT OF THE DIFFERENT SERVICE CHANNELS:

	Telephone	Disk	Online
Market	Ready now	Ready soon	Ready
Cost to PBD	High	Moderate	Moderate
Ease of Use	High, But lacks output storage	High	Low initially, then high
Pacific Bell Benefit	Network Usage, Voice Mail	N/A	Network usage
Information currency	Real-time	Up to 4X/year	Real-time
Degree of user control	High/Moderate	Moderate	High

PCs were forecasted to reach "mass market" status (30%) of households in 1992; modems were not forecasted to reach that status in this period.

KEY DEVELOPMENTAL STEPS:
The 1990 EYP Progress Report identified the delivery systems as key developmental step:

- Develop functional specifications for various EYP delivery systems:
  - Server
  - Telephone-based
  - Disk-based
  - Online

- Assess appropriateness of available hardware/software configurations

- Develop prototypes

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[25]EYP Progress Report, June 22, 1990 (PB Document 034588 - 623)

- Prototyping access from home, workplace, automobile, and public locations:
  - GIS trial/Online access
  - ETAK in-car navigation system
  - Telephone access
  - Disk access
  - Kiosks

- PBD, PB/Information Service Group and PB/Planning reported to have begun to assess the following elements of the regulatory situation
  - Optimal placement of EYP development within the Telesis family
  - Will the California Commission place EYP above or below the line?
  - Should EYP be developed within a regulated or deregulated framework?

1991 DEVELOPMENTAL OPTIONS:

THE AGGRESSIVE OPTION:	THE LESS AGGRESSIVE OPTION:
A. Demand Environment	A. Demand Environment
1. Shopping habits study	1. Study of prior Videotex experiences
2. Consumer Research	2. Test of in-car EYP product
3. Concept definition, testing and refinement	3. GIS/Online prototype
B. Database	B. Database

1. Design structure
  a. How is data stored/ retrieved?
	1. Data collection tests (limited)
	  a. Sales force
	  b. Questionnaires

2. Data collection tests (extensive)
  a. Sales force
  b. Questionnaires
  c. Tele-Research	

C. <u>System</u>   C. <u>System</u>

1. Functional Spec.   1. Functional Spec.

2. System prototypes
   a. Telephone access
      prototype
   b. Test of in-car EYP
      product (ETAK)
   c. GIS/Online prototype
   d. Disk access prototype
   e. Kiosk access prototype

D. <u>Strategic Alliances</u>   D. <u>Strategic Alliances</u>

1. Newspapers   1. Mapping/GIS Companies

2. Mapping/GIS Companies

3. Others

E. <u>Regulatory Situation</u>   E. <u>Regulatory Situation</u>

1. Pursue with Bell and   1. Pursue with Bell and
   Telesis   Telesis

The report comes to a recommendation for The Aggressive Option.
The cited rationale for the recommended Aggressive Option were:

- <u>EYP has important revenue and profit potential for PBD</u>
- <u>PBD database provides a potential competitive advantage</u>
- Expected 1990 or 1991 MFJ relief makes action urgent
- EYP development will be a lengthy and costly process which we
  must begin now in order to be ready potent competitions

The report also stated that the recommended EYP development
strategy would need to be pursued with funding from Pacific Bell.
Formal designation of PBD as the Pacific Telesis Company with
primary responsibility to develop EYP should accompany Pacific
Bell funding.

The report said that a less aggressive fallback development
strategy could be accomplished within PBD's project pool.

YELLOW PAGES ON DISK IS THE INTERIM STOP ON ROAD TO EYP

Out of the four main channels of delivery, Yellow Pages on Disk is seen, according to a Business Case Summary for Preliminary Funding Request[26], an "interim stop on the road" to the development of EYP and probably the first one to be offered:

According to this Funding Request, Yellow pages on Disk (YPD) is a CD-ROM which contains all of the listings from the 104 directories published by PBD. The product consists of two data streams loaded onto a single CD-ROM disk:

- Basic listing information from PBD (a business' name, address, phone number, heading(s), 9-digit zip code, etc.)
- An enhanced index for easy searching of the database.

YPD is expected to be sold to commercial, library and consumer customers. It would be available to businesses and libraries as quarterly and annual subscriptions. Consumer customers would be able to call an 800 number to request specific information from the YPD product. For example, a consumer seeking a list of all of the surfing equipment stores in Northern California would receive by fax or by mail a printout of the relevant listings from all of the Northern California directories.

YPD is an interim stop on the road to the development and deployment of an enhanced Yellow Pages system. The fully enhanced Yellow Pages system at the end of the road would contain more information than our printed directories, and would offer enhanced functionality, such as easier searching, mapping and navigation capabilities, and, eventually, transactions.

YPD takes small steps in both of these directions. It would provide information about specific businesses which is absent from the printed directories, such as zip codes, and, in the future, YPD would provide revenue ranges and number of employees of a business. It would bring together more information than is typically available to customers by combining all of the listings from all of PBD's directories onto one disk. It would improve the currency of information available to customers by offering regularly updated versions of the printed directories.

Additional functionality is provided by the enhanced index. The new index would make searching YPD easier than searching the printed product. The index begins with the list of headings used in the SMART Yellow Pages. This list of headings would be enhanced in several ways:

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[26]Yellow Pages On Disk, Business Case Summary, Preliminary Funding Request. (PB Document #016462 - 472)

A synonym table will be developed to facilitate searching. For example, a customer looking for tuxedo rentals must determine somehow that tuxedos are listed under "Formal Wear" in the printed SMART Yellow Pages. With the enhanced index, customers who key in "Tuxedo" would be brought directly to the listings for tuxedos.

Manufacturer and product fields would be added. These additions would enable customers to generate, for example, a list of the places where Sony products are sold or repaired, or a list of the places where tennis equipment are available.

The report states that research conducted in 1991 disclosed that customers desire to search the SMART Yellow Pages database for manufacturers and products, as well as for business entities. The work done on the YPD product would be a step toward the development of a more complete indexing scheme for a future enhanced-database.

Finally, the combining of the listings from all of PBD's directories on one CD-ROM would enable a kind of searching that is difficult or impossible with the printed product. Customers using YPD would be able to search for listings in given headings across a large number of directories, combining geography and subject in any manner they choose.

FIRST STEP IN THE DIRECTION OF A BUSINESS-TO-BUSINESS EYP

The Funding Request characterizes YPD as a first step in the direction of a business-to-business EYP product.

Initially, YPD is positioned in the business-to-business list market, to take advantage of the existing demand described in the section below. Enhancement of the CD-ROM readers in California businesses, will enable the repositioning of YPD as an EYP product.

Increase penetration of CD-ROM drives is a prerequisite to moving YPD in the direction of becoming an advertising product. Advertisers will not spend money to purchase ads in a CD-based medium until most of their customers and prospective customers acquire the capability to read CD-ROMs.

Sales of CD-ROM drives are growing rapidly, and prices have fallen to below the $500 range. CD-ROM readers are becoming mor the rule than the exception in technology companies, advertising agencies, media firms, and other information-intensive companies As critical masses of companies in these and other vertical

markets acquire CD technology, niche business-to-business CD-ROM
directory opportunities will arise.

YPD would position PBIS to take advantage of these opportunities.
With the database, the software, and the distribution capability
in place, PBIS would be able to enter the CD-ROM directory market
by selling advertising to businesses interested in reaching other
businesses in vertical markets where CD-ROM drives achieve
significant market share. These vertical business-to-business
directory markets would enable PBIS to generate significantly .
more revenues from YPD than is achievable with the initial list
market positioning.

STRONG ANECDOTAL AND QUALITATIVE EVIDENCE OF DEMAND FOR SMART YELLOW PAGES PRODUCTS IN ELECTRONIC FORM

Most users of the SMART Yellow Pages employ PBD products to
search for locations of products or services they plan to buy. A
smaller number of current users of SMART Yellow Pages employ PBD
products to find potential buyers of products or services they
offer to sell. This is the secondary market for SMART Yellow
Pages information and YPD will be positioned in this market.

The Funding Request states that YPD builds off the existing
demand for secondary distribution of PBD's printed products.
Secondary distribution is handled by PBD's SMART Resource Center,
an outside telemarketing facility which fields approximately one
million phone calls each year from consumers and businesses
seeking additional telephone directories. The PBD SMART Resource
Center handles the calls and mails printed directories to
customers. The Funding Request claims that YPD would enable the
PBD SMART Resource Center, or another telemarketing facility, to
provide CD-ROM versions of the printed directories to customers
who need them, or to provide subsets of the data in the printed
directories for customers with more limited needs.

The Funding Request states that no quantitative research has been
conducted to determine the volume of demand for YPD. This
research is proposed as part of the YPD action plan. However,
there exists strong anecdotal and qualitative evidence of demand
for SMART Yellow Pages products in electronic form. PBD SMART
Resource Center sales reps have reported over the years that
customers consistently inquire about the availability of PBD
directories in disk form. In response to this customer input,
the PBD SMART Resource Center began, in September 1990, to sell
lists sourced from an outside vendor.

The Funding Request states that although these lists were not as
current or as comprehensive as the data available from PBD, the

PBD SMART Resource Center exceeded its goals for units and revenue in 1991 by 56% and 75%, respectively. This performance was accomplished without advertising, direct mail or promotion. The only way customers discovered the availability of the lists from the PBD SMART Resource Center was from a sheet slipped into a SMART Resource Center catalog, or by talking with Center telemarketers.

The PBD SMART Resource Center supplemented its anecdotal and marketplace perception of demand for directory information on disk with focus groups conducted in 1991. In the groups, customers expressed strong interest in disk-based access to PBD's directories. "Many participants currently receive marketing information in electronic form that is compatible with their databases," concluded the firm which conducted the focus groups. "Downloading the current PBD SMART RESOURCE CENTER directory products onto disks would increase their value to a large number of customers."

KEY ASSUMPTIONS INCLUDE EFFECTIVE MANAGEMENT OF SIMULTANEOUS OFFERING OF YELLOW PAGE DATABASE FROM TWO DIFFERENT ORGANIZATIONS WITHIN PACIFIC TELESIS COMPANY

KEY ASSUMPTIONS:

1. Customers own or will have access to the devices required to read the information on the YPD CD-ROMs.

According to the Optical Publishing Association, the worldwide installed based of CD-ROM drives is growing exponentially, albeit from a very small base.

YEAR	INSTALLED BASE	GROWTH RATE
1986	9,000	n/a
1987	32,500	261%
1988	168,000	417%
1989	549,000	127%
1990	1,316,000	140%
1991	3,026,000	130%
1992 (forecast)	6,494,000	114%

Approximately 66% of these drives are in the United States, according to the Optical Publishing Association. Assuming that California's share of drives is proportional to its share of the U. S. population, there are approximately 640,000 CD-ROM drives in this state.

In order to assure that interested customers have access to the technology needed to use YPD, PBD plans to arrange with a

manufacturer or distributor of CD-ROM drives to offer YPD customers attractive rates on the purchase of drives:

2. **The simultaneous offering of Yellow Pages data in print by one organization within Pacific Telesis Group, and of similar data in electronic form by another organization within the company can be managed effectively.**

The Funding Request proposes the best solution to this apparent problem is to have the PBD SMART Resource Center's telemarketing force sell both the existing print SMART Yellow Pages product, and the YPD product.

YPD WILL PROVIDE VALUABLE MARKETING EXPERIENCE WHILE "LENGTHY" REGULATORY PROCEEDINGS ARE HELD UP

The Funding Request cites two reasons for proceeding with the interim product represented by YPD. First, the Company can make money on YPD. It claims that there is substantial evidence of existing demand for the product, the Company has a method to reach the market efficiently, and the fundamental economics of the business are attractive.

Second, YPD can be brought to market quickly. The deployment of an enhanced Yellow Pages database raises several key regulatory questions at the California Commission, questions which can be resolved only through a lengthy inquiry process. The Funding Request cites that YPD will provide them valuable marketplace experience while the regulatory issues surrounding the database project are under consideration.

YPD WILL BE POSITIONED AS AN EASIER WAY TO GET ACCESS TO THE INFORMATION CONTAINED IN PBD'S DIRECTORIES

The Funding Request definitely is not suggesting PBD to be the one to provide YPD, and in many occasions refers to another non-regulated Telesis affiliate, PBEPS to be the provider instead. Nevertheless, the Request cites that YPD will be positioned as an easier way to gain access to the information contained in PBD's directories. Such positioning will also include special emphasis on YPD as a source for current listings of all California businesses of material size.

YPD will be offered to current PBD SMART Resource Center customers, as well as to other businesses which are intensive users of Yellow Pages-type information.

CANNIBALIZATION OF EXISTING PBD SMART RESOURCE CENTER BUSINESS

The Funding Request acknowledges that YPD will compete for customers with the existing PBD SMART Resource Center business and the YPD product is substantially similar in content to the printed PBD directories.

However, the Funding Request defends the fact that PBD SMART Resource Center actually loses money on the sale of PBD's SMART Yellow Pages directories. All of the PBD SMART Resource Center's profit is attributable to its leasing of Pacific Bell's Street Address Telephone Directories, and to sales of products sourced from third parties. The Funding Request speculates that moving the sales of SMART Yellow Pages directories to the YPD platform should be appealing to the California Commission, PBD, and PBEPS.

BENEFITS OF [REDACTED] INFORMATION PRODUCTS

Another plan, the 1992 Business Plan[27] proposed to spend 1992
[REDACTED
                              ] This plan would have
[REDACTED] key benefits:

[REDACTED ✎✎

✎✎ REDACTED]

Specifically, the 1992 research plan was [REDACTED ✎✎

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27 1992 EYP Business Plan (PB Document #014584 - 586)

∿∿ REDACTED .

OTHER ELECTRONIC APPLICATION IDEAS

On the road to developing EYP, besides the four main channels of
delivery described above, there were other electronic
applications contemplated:

    1. Fax (EYP)
    2. Front-of-Book Audiotext (FOB)

1. Fax (EYP)

The potential for linking the Fax market with the yellow page
operations was also contemplated. It was noted that consumers
with their own fax machines would be likely candidates for
connecting to the PBD SMART*FACTS network. Some type of
cooperative arrangement with the cable companies was also
considered a possibility. As an illustration of how a Yellow
Page advertiser could use such a service the following was
offered an example:

> "...SmartTalk with fax as well as audio information. A
> restaurant could advertise: 'For a copy of our menu and
> daily special, please call xxx from your fax machine.' An
> architectural firm could offer faxed drawings of their
> latest completed buildings. A gym could publish membership
> rates, coupons, etc. "∴

2. Front of Book Audiotext

Front-of-book audiotext (FOB) is described as a section near the
front of the yellow page directory that offers recorded
information free of charge on a variety of general-interest
topics. Such services were introduced in the early 1980s by

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[28]September 7, 1990 memo from Kozlowski to Ted West (PB Docume:
#034763)

independent directory publishers. The revenue potential for the
YELLOW PAGE publisher is derived from the sale of pages to the
information providers (IPs). The IPs in turn sell audio and/or
sell print sponsorships.

Considering the regulatory restraints placed on the RBOCs in
contrast to independent publishers, the RBOCs have generally
considered FOB features as a source of limited revenue. It would
primarily serve as an opportunity for greater use of the
directory product.

On the other hand the FOB Audiotext product has been closely
related to the emerging electronic publishing technology. As
such the PacBell Directory assessment in 1991 was:

> "As the RBOC directory publishing affiliates are granted
> the freedoms necessary and comparable to those of
> independent publishers for pursuing FOB audiotext, we
> will explore further the opportunities for PBD in this
> regard."[29]

The perception at Pacific Bell of FOB Audiotex services in 1991
seems to be that such services were much more beneficial to those
companies with a small YELLOW PAGE market share. In fact, rather
than a revenue or usage builder, FOB is a most effective way of
differentiating a low-market-share product from its competition.
This is evidenced by the following 1990 breakdown of 58
publishers who used audiotex in 459 directories:[30]

Publisher Type	Number Companies	Number of Directories
Regional Bells*	7	80
Independent Telcos	13	107
Independent Publishers	38	272
	58	459

It can be seen from these figures that despite the fact that most
directories are published by telco companies most directories
using audiotex are published by independent companies.

Generating Revenue

For a publishing company, two ways to generate revenues are to
either sell a fixed number of pages to an audiotex service bureau

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[29] 3/18/91 Memo from Rick Hamer and Katherine Burtt
"FRONT-OF-BOOK AUDIOTEXT FEATURES", (PB Document #035118 - 120)

[30] EYP Project Manager's Memo, March 26, 1991, "Front of the Book
Audiotex" (PB Document #035113-117)